

ATTACHMENT B/AP20 Rec'd PCT/PTO 30 DEC 2005
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original) A method of generating antibodies useful for assaying a sample for fuel oxygenates comprising (i) conjugating a hapten having a $\text{CH}_3\text{O}-\text{C}(\text{CH}_3)_2-\text{CH}_2-$ moiety to a carrier protein to produce a conjugate; (ii) injecting the conjugate into an animal; (iii) harvesting antibody-synthesising cells from the animal; (iv) fusing the antibody-synthesising cells with myeloma cells to form hybridoma cells; (v) cultivating the hybridoma cells; (vi) screening the cultivated cells to find desired cells producing monoclonal antibodies capable of binding methyl tert-butyl ether ("MTBE"); and (vii) cultivating said desired cells and harvesting said monoclonal antibodies.

2. (Original) A method according to claim 1 wherein said hapten is: $\text{CH}_3\text{O}-\text{C}(\text{CH}_3)_2-\text{CH}_2-\text{X}-\text{B}$
 where X is a spacer and B is a group capable of binding to a carrier protein.

3. (Original) A method according to claim 2 wherein the spacer X comprises a hydrocarbon chain of 2-8 carbon atoms.

4. (Original) A method according to claim 3 wherein the spacer X is:
 $-\text{CH}_2.\text{CH}_2.\text{CH}(\text{CH}_3).\text{CH}_2-$

5. (Currently Amended) A method according to claim 2, ~~3 or 4~~ wherein the binding group B is $-\text{CHO}$.

6. (Currently Amended) A method according to ~~any preceding~~ claim 1 wherein the carrier protein is selected from bovine serum albumin, human serum albumin, rabbit thyroglobin and keyhole limpet haemocyanin.

7. (Currently Amended) A method according to ~~any preceding claim~~ 1 wherein the monoclonal antibodies exhibit binding to methyl tert-butyl ether, ethyl tert-butyl ether, methyl tert-amyl ether and tert-butyl alcohol.
8. (Currently Amended) A monoclonal antibody capable of binding methyl tert-butyl ether as produced by the method of ~~any preceding claim~~ 1.
9. (Currently Amended) A method of assaying a sample for fuel oxygenates and their breakdown products comprising generating antibodies by a method according to ~~any of claims 1-8~~ and carrying out an immunoassay using said antibodies.